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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/255,892	02/23/1999	CHARLES EDWARD BOICE	EN998082	9132

7590 01/14/2004

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EXAMINER

AN, SHAWN S

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 01/14/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/255,892

Applicant(s)

BOICE ET AL.

Examiner

Shawn S An

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Response to Reconsideration

1. Applicant's remarks filed on 10/14/03 have been fully considered but they are not persuasive. The Applicants present arguments of which Wheeler et al does not disclose switching between complete sets of tables and updating one set of Q matrix tables of the multiple sets of Q matrix tables within the quantizer while another set of Q matrix tables is in use by the quantizer, and Hang et al reference fails to teach a default Q table.

However, after careful scrutiny of the Wheeler et al and Hang et al's references, the Examiner must respectively disagree, and maintain the grounds of rejection for the reasons that follow.

In response, even though Wheeler et al's Fig. 7, element 690, appears to be a single Q table, Wheeler et al discloses that the **Q tables** are stored in Q table rams 690, and CPU loads the tables as required, and the CPU updates Q tables on video stream context switches (col. 13, lines 28-32), which meets the claimed limitations of switching between complete sets of tables and updating one set of Q matrix tables of the multiple sets of Q matrix tables within the quantizer while another set of Q matrix tables is in use by the quantizer. In other words, the CPU updates a set of Q tables and switches a set of Q tables from the multiple sets of loaded Q matrix tables.

Note: the Examiner quoted col. 9, lines 25-36 as updating one set of Q matrix tables of the multiple sets of Q matrix tables within the quantizer while another set of Q matrix tables is in use by the quantizer because when MQANT values are updated, subsequently Q matrix tables comprising MQANT values are updated as well.

Therefore, Wheeler et al indeed discloses updating one set of Q matrix tables of the multiple sets of Q matrix tables within the quantizer while another set of Q matrix tables is in use by the quantizer as discussed above.

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Furthermore, Hang et al teaches a **table of default Q** step size values (abs.), which clearly meets the claimed limitation of default Q table.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-4, 10-12, 18-20, 23-25, and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Wheeler et al (5,825,680) as previously discussed in the last Office action filed on 7/11/03 as Paper 20.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims (5-6, 9), and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wheeler et al as applied to claims 1 and 18 above, respectively, and further in view of Hang et al (5,710,595) as previously discussed in the last Office action filed on 7/11/03 as Paper 20.

6. Claims 7-8 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wheeler et al as applied to claims 1 and 18 above, respectively, and further in view of Riek et al (5,987,179) as previously discussed in the last Office action filed on 7/11/03 as Paper 20.

7. Claims 13-17 and 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wheeler et al as applied to claims 1 and 18 above, respectively, and further in view of Hosono (5,796,438) as previously discussed in the last Office action filed on 7/11/03 as Paper 20.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawn An whose telephone number (703) 305-0099 and schedule are Tuesday-Friday.



SSA

SHAWN S. AN
PATENT EXAMINER

January 11, 2004